# NOTIFICATION OF ADDENDUM ADDENDUM NO. 1 DATED 6/27/2013

Control	0068-01-066
Project	STP 2013(837)MM
Highway	US 87
County	LUBBOCK

#### Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

```
SUBJECT: PLANS AND PROPOSAL ADDENDUMS
       PROJECT: STP 2013(837)MM
                                 CONTROL: 0068-01-066
       COUNTY: LUBBOCK
       LETTING: 07/09/2013
       REFERENCE NO: 0625
                          PROPOSAL ADDENDUMS
  PROPOSAL COVER
X BID INSERTS (SH. NO.: 2-17, 4-17, 12-17
X GENERAL NOTES (SH. NO.: X - Z
_ SPEC LIST
              (SH. NO.:
_ SPECIAL PROVISIONS:
  ADDED:
       DELETED:
  SPECIAL SPECIFICATIONS:
  ADDED:
      DELETED:
X OTHER: See changes outlined below.
DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)
Bid inserts:
  Sheet 2-17: Item 416-2004 quantity change.
  Sheet 4-17: Item 442-2048 quantity change.
  Sheet 12-17: Item 668-2021 is deleted.
               Item 668-2022 is deleted.
               Item 668-2106 is added.
               Item 668-2107 is added.
General Notes:
  Sheet X: note for item 3268 is revised.
  Sheet Y: note for item 3271 is revised.
Sheets X - Z: information has shifted due to the changes above.
Plan Set:
  The following sheets are revised:
  1.02, 1.06, 1.07
  The following sheets are replaced:
  1.09 - 1.25, 7.07, 7.21, 7.25
  The Following sheets are added:
  6.36, 6.37
```

)

	ITI	EM-COI	ЭE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.		UNIT BID PRICE ONLY. WRITTEN IN WORDS			DEPT USE ONLY
	100	2002	002	PREPARING ROW and	DOLLARS CENTS	STA	48.000	1
	110	2001		EXCAVATION (ROADWAY) and	DOLLARS CENTS	CY	24,565.000	2
	132	2006		EMBANKMENT (FINAL)(DENS C	CONT)(TY C) DOLLARS CENTS	CY	95,601.000	3
	161	2014	006	COMPOST MANUF TOPSOIL (BC	DOS OR PB) (4") DOLLARS CENTS	SY	66,279.000	4
	162	2002		BLOCK SODDING and	DOLLARS CENTS	SY	3,715.000	5
	164	2021	002	CELL FBR MLCH SEED(PERM)(RURAL)(SANDY) and	DOLLARS CENTS	SY	66,279.000	6
	164	2033	002	DRILL SEEDING (PERM) (RURA) and	L) (SANDY) DOLLARS CENTS	SY	66,279.000	7
	164	2051	002	DRILL SEED (TEMP)(WARM OR and	COOL) DOLLARS CENTS	SY	66,279.000	8
	168	2001		VEGETATIVE WATERING and	DOLLARS CENTS	MG	125.000	9
	216	2001		PROOF ROLLING and	DOLLARS CENTS	HR	100.000	10

	ITI	EM-COI	ЭE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	247	2104	033	FL BS (RDWY DEL) (TY A GR 4) and	(IN VEH) DOLLARS CENTS	CY	1,360.000	11
	251	2358		REWORK BS MTL (TY B) (12"-14 and	") (DC) DOLLARS CENTS	SY	51,927.000	12
	310	2001		PRIME COAT (MC-30) and	DOLLARS CENTS	GAL	13,787.000	13
	315	2004		FOG SEAL (CSS-1H)	DOLLARS CENTS	GAL	6,367.000	14
	354	2043		PLANE ASPH CONC PAV (1") and	DOLLARS CENTS	SY	42,560.000	15
	354	2048		PLANE ASPH CONC PAV (3") and	DOLLARS CENTS	SY	42,560.000	16
	400	2005		CEM STABIL BKFL	DOLLARS CENTS	CY	182.710	17
	400	2023		CEM STAB BKFL (BEHIND ABUT	TMENT) DOLLARS CENTS	СҮ	221.000	18
	416	2004	001	DRILL SHAFT (36 IN) and	DOLLARS CENTS	LF	720.000	19
	416	2016	001	DRILL SHAFT (SIGN MTS)(12 IN) and	DOLLARS CENTS	LF	14.000	20
	416	2018	001	DRILL SHAFT (SIGN MTS)(24 IN) and	DOLLARS CENTS	LF	44.000	21

	ITI	EM-COI	ЭE					DEPE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	416	2029	001	DRILL SHAFT (RDWY ILL POLE)	) (30 IN) DOLLARS CENTS	LF	112.000	22
	416	2032	001	DRILL SHAFT (TRF SIG POLE) (3	6 IN) DOLLARS CENTS	LF	119.000	23
	416	2034	001	DRILL SHAFT (TRF SIG POLE) (4	8 IN) DOLLARS CENTS	LF	22.000	24
	420	2041	002	CL C CONC (ABUT)(HPC) and	DOLLARS CENTS	CY	76.800	25
	420	2256	002	CL S CONC(APPR SLAB)(HPC) and	DOLLARS CENTS	CY	157.900	26
	422	2003		REINF CONC SLAB (HPC)(CL S) and	DOLLARS CENTS	SF	8,000.000	27
	423	2001		RETAINING WALL (MSE) and	DOLLARS CENTS	SF	52,116.000	28
	425	2067	001	PRESTR CONC GIRDER (TX46) and	DOLLARS CENTS	LF	895.200	29
	429	2008	008	CNC STR REP (VERTICAL OR OV	/ERHEAD) DOLLARS CENTS	SF	30.000	30
	430	2008		CL C CONC FOR EXT STRU(CUL	V)(3'X 3') DOLLARS CENTS	LF	52.000	31
	430	2020		CL C CONC FOR EXT STR (CULV	DOLLARS CENTS	LF	11.000	32

	ITI	EM-COI	ЭE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	432	2001		RIPRAP (CONC)(4 IN) and	DOLLARS CENTS	CY	789.000	33
	432	2002		RIPRAP (CONC)(5 IN) and	DOLLARS CENTS	CY	2.900	34
	442	2048	016	STRUCTURAL STEEL(MISC NON	N-BRIDGE) DOLLARS CENTS	LB	888.000	35
	450	2211	001	RAIL (TY T551) (HPC) and	DOLLARS CENTS	LF	3,600.000	36
	454	2005	003	ARMOR JOINT (WITH SEAL) and	DOLLARS CENTS	LF	158.000	37
	462	2003	015	CONC BOX CULV (4 FT X 2 FT) and	DOLLARS CENTS	LF	78.000	38
	464	2007	006	RC PIPE (CL III)(30 IN) and	DOLLARS CENTS	LF	459.400	39
	464	2062	006	RC PIPE (ARCH)(CL III)(DES 1) and	DOLLARS CENTS	LF	175.200	40
	465	2003	001	INLET (COMPL)(TY H) and	DOLLARS CENTS	EA	2.000	41
	467	2024		SET (TY I)(S= 3 FT)(HW= 4 FT)(3:	1)(C) DOLLARS CENTS	EA	1.000	42
	467	2030		SET (TY I)(S= 4 FT)(HW= 3 FT)(3:	1)(C) DOLLARS CENTS	EA	4.000	43

	ITI	EM-COI	ЭE					DEPT
ALT	ITEM NO				UNIT	APPROX QUANTITIES	USE ONLY	
	467	2290		SET (TY II)(30 IN)(RCP)(6:1)(P) and	DOLLARS CENTS	EA	8.000	44
	467	2514		SET (TY II)(DES 1)(RCP)(6:1)(C) and	DOLLARS CENTS	EA	2.000	45
	480	2001		CLEAN EXIST CULVS	DOLLARS CENTS	EA	2.000	46
	496	2016		REMOV STR (PIPE) and	DOLLARS CENTS	EA	3.000	47
	500	2001	011	MOBILIZATION and	DOLLARS CENTS	LS	1.000	48
	502	2001	033	BARRICADES, SIGNS AND TRADLING and	FFIC HAN- DOLLARS CENTS	МО	18.000	49
	508	2002		CONSTRUCTING DETOURS	DOLLARS CENTS	SY	1,532.000	50
	512	2049	002	PORT CTB (DES SOURCE)(F-SHA	APE)(TY 1) DOLLARS CENTS	LF	3,680.000	51
	512	2051	002	PORT CTB (STOCKPILE)(F-SHAI	PE)(TY 1) DOLLARS CENTS	LF	3,680.000	52
	514	2015	002	PERM CONC TRF BARR (F-SHAI	PE)(TY 1) DOLLARS CENTS	LF	2,574.000	53

	ITI	EM-COI	ЭE					DEPE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	529	2004		CONC CURB & GUTTER (TY II)		LF	4,156.000	54
				and	DOLLARS CENTS			
	533	2006	014	SHOULDER TEXTURING (MILLED)(ASPHALT) and	DOLLARS CENTS	LF	15,174.000	55
	536	2002		CONC MEDIAN and	DOLLARS CENTS	SY	38.000	56
	540	2011	031	MTL BEAM GD FEN TRANS (TH	RIE-BEAM) DOLLARS CENTS	EA	2.000	57
	540	2044	031	DOWNSTREAM ANCHOR TERM NAL(DAT)SECTION and	I- DOLLARS CENTS	EA	2.000	58
	540	2046	031	MTL BM GD FEN TRANS (NON-S	SYM) DOLLARS CENTS	EA	2.000	59
	544	2001		GUARDRAIL END TREATMENT and	(INSTALL) DOLLARS CENTS	EA	2.000	60
	545	2001		CRASH CUSH ATTEN (INSTL) and	DOLLARS CENTS	EA	2.000	61
	545	2049		CRASH CUSH ATTEN (INSTL)(W	ORK ZONE) DOLLARS CENTS	EA	4.000	62
	545	2051		CRASH CUSH ATTEN (REMOVE ZONE) and	DOLLARS CENTS	EA	4.000	63

	ITEM-CODE		ЭE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WOR		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	610	2054	015	INS RD IL AM (TY ST) 40T-12 (.2	25 KW)S DOLLARS CENTS	EA	14.000	64
	618	2018		CONDT (PVC) (SCHD 40) ( 2") and	DOLLARS CENTS	LF	5,750.000	65
	618	2019		CONDT (PVC) (SCHD 40) (2") (Board	ORE) DOLLARS CENTS	LF	1,049.000	66
	618	2024		CONDT (PVC) (SCHD 40) (4") and	DOLLARS CENTS	LF	850.000	67
	618	2025		CONDT (PVC) (SCHD 40) (4") (Bo	ORE) DOLLARS CENTS	LF	1,193.000	68
	620	2004	001	ELEC CONDR (NO. 2) INSULATE and	ED DOLLARS CENTS	LF	120.000	69
	620	2009	001	ELEC CONDR (NO. 6) BARE and	DOLLARS CENTS	LF	2,217.000	70
	620	2010	001	ELEC CONDR (NO. 6) INSULATE	ED DOLLARS CENTS	LF	17,790.000	71
	620	2012	001	ELEC CONDR (NO. 8) INSULATE	ED DOLLARS CENTS	LF	3,808.000	72
	624	2008	014	GROUND BOX TY A (122311) Wa	APRON DOLLARS CENTS	EA	8.000	73
	624	2014	014	GROUND BOX TY D (162922) Wand	APRON DOLLARS CENTS	EA	17.000	74

	ITI	EM-COI	ЭE				DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	628	2158	003	REMOVE ELECTRICAL SERVICES  DOLLARS and CENTS	EA	1.000	75
	628	2317	003	ELC SRV TY D 120/240 060 (NS)AL(E)SP(U)  DOLLARS and  CENTS	EA	2.000	76
	628	2339	003	ELC SRV TY A 240/480 060 (NS)AL(E)SP(U)  DOLLARS and  CENTS	EA	1.000	77
	636	2001	014	ALUMINUM SIGNS (TY A)  DOLLARS and CENTS	SF	138.000	78
	636	2002	014	ALUMINUM SIGNS (TY G)  DOLLARS and CENTS	SF	295.000	79
	644	2004		IN SM RD SN SUP&AM TY10BWG(1)SA(T)  DOLLARS and  CENTS	EA	42.000	80
	644	2006		IN SM RD SN SUP&AM TY10BWG(1)SA(U)  DOLLARS and  CENTS	EA	2.000	81
	644	2043		IN SM RD SN SUP&AM TYS80(2)SA(P-EXAL)  DOLLARS and  CENTS	EA	2.000	82
	644	2056		RELOCATE SM RD SN SUP & AM TY 10BWG DOLLARS and CENTS	EA	5.000	83
	644	2058		RELOCATE SM RD SN SUP & AM TY S80 DOLLARS and CENTS	EA	2.000	84
	644	2060		REMOVE SM RD SN SUP & AM  DOLLARS and  CENTS	EA	37.000	85

	ITEM-CODE		E					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	647	2001		INSTALL LRSS (STRUCT STEEL)  DOLI and  CENT		LB	1,844.000	86
	647	2002		RELOCATE LRSA  DOLI and  CENT		EA	1.000	87
	647	2003		REMOVE LRSA  DOLI and  CENT		EA	2.000	88
	658	2262		INSTL DEL ASSM (D-SW)SZ (TYC)GF1  DOLI and  CENT	LARS	EA	20.000	89
	658	2263		INSTL DEL ASSM (D-SY)SZ 1(FLX)GNI DOLI and CENT	LARS	EA	10.000	90
	658	2280		INSTL DEL ASSM (D-SY)SZ (TYC)GF10 DOLI and CENT	LARS	EA	20.000	91
	658	2292		INSTL DEL ASSM (D-DW)SZ 1(FLX)GN DOLI and CENT	LARS	EA	14.000	92
	658	2329		INSTL DEL ASSM (D-SW)SZ 1(FLX)GN DOLI and CENT	LARS	EA	30.000	93
	658	2337		INSTL OM ASSM (OM-2Z)(FLX)GND(B DOLI and CENT	LARS	EA	14.000	94
	658	2364		INSTL DEL ASSM (D-SW)SZ 1(TYC)CT DOLI and CENT	LARS	EA	28.000	95
	658	2365		INSTL DEL ASSM (D-SY)SZ 1(TYC)CTE DOLI and CENT	LARS	EA	70.000	96

	ITEM-CODE		E				
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	662	2001		WK ZN PAV MRK NON-REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	1,300.000	97
	662	2002		WK ZN PAV MRK NON-REMOV (W) 4" (DOT)  DOLLARS and  CENTS	LF	12.000	98
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD)  DOLLARS and  CENTS	LF	38,007.000	99
	662	2012		WK ZN PAV MRK NON-REMOV (W) 8" (SLD)  DOLLARS and  CENTS	LF	3,425.000	100
	662	2016		WK ZN PAV MRK NON-REMOV (W) 24" (SLD)  DOLLARS and  CENTS	LF	351.000	101
	662	2017		WK ZN PAV MRK NON-REMOV (W) (ARROW) DOLLARS and CENTS	EA	19.000	102
	662	2018		WK ZN PAV MRK NON-REMOV (W) (DBL ARROW)  DOLLARS and CENTS	EA	9.000	103
	662	2029		WK ZN PAV MRK NON-REMOV (W)36"(YLD TRI)  DOLLARS and CENTS	EA	6.000	104
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)  DOLLARS and  CENTS	LF	44,605.000	105
	662	2050		WK ZN PAV MRK REMOV (REFL) TY I-A DOLLARS and CENTS	EA	32.000	106

	ITI	EM-COD	E				D.E.D.E.
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	662	2052		WK ZN PAV MRK REMOV (REFL) TY I-C DOLLARS and CENTS	EA	32.000	107
	662	2060		WK ZN PAV MRK REMOV (TRAF BTN) TY W DOLLARS and CENTS	EA	92.000	108
	662	2062		WK ZN PAV MRK REMOV (TRAF BTN) TY Y DOLLARS and CENTS	EA	92.000	109
	662	2064		WK ZN PAV MRK REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	950.000	110
	662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD)  DOLLARS and  CENTS	LF	6,114.000	111
	662	2098		WK ZN PAV MRK REMOV (Y) 4" (DOT)  DOLLARS and  CENTS	LF	24.000	112
	662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD)  DOLLARS and  CENTS	LF	5,955.000	113
	662	2113		WK ZN PAV MRK SHT TERM (TAB) TY W DOLLARS and CENTS	EA	2,255.000	114
	662	2115		WK ZN PAV MRK SHT TERM (TAB) TY Y-2 DOLLARS and CENTS	EA	430.000	115
	666	2006		REFL PAV MRK TY I (W) 4" (DOT)(100MIL)  DOLLARS and  CENTS	LF	45.000	116
	666	2036		REFL PAV MRK TY I (W) 8" (SLD)(100MIL)  DOLLARS and  CENTS	LF	2,263.000	117

	ITI	EM-COI	ЭE				DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	666	2048		REFL PAV MRK TY I (W) 24"(SLD)(100MIL)  DOLLARS and  CENTS	LF	300.000	118
	666	2141		REFL PAV MRK TY I (Y)(MED NOSE)(100MIL)  DOLLARS and  CENTS	EA	2.000	119
	668	2106		PREFAB PAV MRK TY C (W) (ARROW)  DOLLARS and  CENTS	EA	11.000	120
	668	2107		PREFAB PAV MRK TY C (W) (DBL ARROW) DOLLARS and CENTS	EA	21.000	121
	672	2012	034	REFL PAV MRKR TY I-C  DOLLARS and  CENTS	EA	15.000	122
	672	2017	034	REFL PAV MRKR TY II-C-R  DOLLARS and  CENTS	EA	208.000	123
	677	2001		ELIM EXT PAV MRK & MRKS ( 4")  DOLLARS and  CENTS	LF	83,912.000	124
	677	2003		ELIM EXT PAV MRK & MRKS ( 8")  DOLLARS and  CENTS	LF	1,205.000	125
	677	2007		ELIM EXT PAV MRK & MRKS (24")  DOLLARS and  CENTS	LF	142.000	126
	677	2008		ELIM EXT PAV MRK & MRKS (ARROW)  DOLLARS  and  CENTS	EA	11.000	127
	677	2009		ELIM EXT PAV MRK & MRKS (DBL ARROW) DOLLARS and CENTS	EA	5.000	128

	ITI	EM-COI	ЭE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI	UNIT	APPROX QUANTITIES	DEPT USE ONLY	
	678	2001		PAV SURF PREP FOR MRK ( 4") and	DOLLARS CENTS	LF	1,080.000	129
	678	2012		PAV SURF PREP FOR MRK (MED and	NOSE) DOLLARS CENTS	EA	2.000	130
	680	2003		INSTALL HWY TRF SIG (SYSTEM and	DOLLARS		2.000	131
	682	2001	003	BACK PLATE (12 IN) (3 SEC) and	PLATE (12 IN) (3 SEC)  DOLLARS CENTS		20.000	132
	682	2003	003	BACK PLATE (12 IN) (5 SEC) and	DOLLARS CENTS	EA	2.000	133
	682	2022	003	VEH SIG SEC (12 IN) LED (GRN A	ARW) DOLLARS CENTS	EA	5.000	134
	682	2023	003	VEH SIG SEC (12 IN) LED (GRN) and	DOLLARS CENTS	EA	19.000	135
	682	2024	003	VEH SIG SEC (12 IN) LED (YEL A	ARW) DOLLARS CENTS	EA	5.000	136
	682	2025	003	VEH SIG SEC (12 IN) LED (YEL) and	DOLLARS CENTS	EA	19.000	137
	682	2026	003	VEH SIG SEC (12 IN) LED (RED A	ARW) DOLLARS CENTS	EA	3.000	138
	682	2027	003	VEH SIG SEC (12 IN) LED (RED) and	DOLLARS CENTS	EA	19.000	139

	ITI	EM-COD	E				DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	684	2010		TRF SIG CBL (TY A) (12 AWG) ( 5 CONDR)  DOLLARS  and  CENTS	LF	849.000	140
	684	2012		TRF SIG CBL (TY A) (12 AWG) ( 7 CONDR)  DOLLARS and  CENTS	LF	422.000	141
	684	2017		TRF SIG CBL (TY A) (12 AWG) (12 CONDR)  DOLLARS  and  CENTS	LF	1,768.000	142
	686	2023		INS TRF SIG PL AM(S) 1 ARM (24')  DOLLARS and  CENTS	EA	1.000	143
	686	2025		INS TRF SIG PL AM(S) 1 ARM (24') LUM  DOLLARS  and  CENTS	EA	2.000	144
	686	2029		INS TRF SIG PL AM(S) 1 ARM (28') LUM  DOLLARS and  CENTS	EA	2.000	145
	686	2031		INS TRF SIG PL AM(S) 1 ARM (32')  DOLLARS and  CENTS	EA	3.000	146
	686	2045		INS TRF SIG PL AM(S) 1 ARM (44') LUM  DOLLARS  and  CENTS	EA	1.000	147
	686	2053		INS TRF SIG PL AM(S) 1 ARM (50') LUM  DOLLARS  and  CENTS	EA	1.000	148
	686	2308		TRAFFIC SIG POLE ASSEM (RELOCATE)  DOLLARS and  CENTS	EA	2.000	149
	690	2006		REMOVAL OF GROUND BOXES  DOLLARS and CENTS	EA	18.000	150

	ITI	EM-COI	ЭE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI	UNIT	APPROX QUANTITIES	DEPT USE ONLY	
	690	2008		INSTALL OF GROUND BOXES and	TALL OF GROUND BOXES  DOLLARS  CENTS		2.000	151
	690	2020		INSTALL OF ELECTRICAL SERV	INSTALL OF ELECTRICAL SERVICE  DOLLARS and  CENTS		1.000	152
	690	2038		REMOVAL OF CONTROL CABINET (GRND MNT)  DOLLARS and CENTS		EA	2.000	153
	690	2043		INSTALL OF CONTROL CABINET (POLE MNT)  DOLLARS and  CENTS		EA	1.000	154
	730	2002		FULL-WIDTH MOWING and	DOLLARS CENTS	AC	53.600	155
	734	2002		LITTER REMOVAL	DOLLARS CENTS	CYC	4.000	156
	1122	2002	001	ROCK FILTER DAMS (INSTALL) and	(TY 2) DOLLARS CENTS	LF	775.000	157
	1122	2009	001	ROCK FILTER DAMS (REMOVE) and	DOLLARS		775.000	158
	1122	2016	001	CONSTRUCTION EXITS (INSTALL) (TY 1)  DOLLARS  and  CENTS		SY	800.000	159
	1122	2019	001	CONSTRUCTION EXITS (REMO	VE) DOLLARS CENTS	SY	800.000	160

	ITI	EM-COI	ЭE					DEPT
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WOR	UNIT	APPROX QUANTITIES	USE ONLY	
	1122	2031	001	SANDBAGS FOR EROSION CON	SANDBAGS FOR EROSION CONTROL DOLLARS and CENTS		69.000	161
	1122	2037	001	TEMPORARY SEDIMENT CONTROL FENCE INSTLL DOLLARS and CENTS		LF	2,400.000	162
	1122	2057	001	TEMPORARY SEDIMENT CONTROL FENCE REMOVE DOLLARS and CENTS		LF	2,400.000	163
	3268	2086		D-GR HMA TY-B PG70-28 and	DOLLARS CENTS	TON	22,227.000	164
	3271	2048		STONE-MTRX-ASPH SMA-D SA	C-A PG70-28 DOLLARS CENTS	TON	7,409.000	165
	6007	2001		REMOVING TRAFFIC SIGNALS and	DOLLARS CENTS	EA	1.000	166
	6266	2001	017	VIVDS PROCESSOR SYSTEM and	DOLLARS CENTS	EA	3.000	167
	6266	2002	017	VIVDS CAMERA ASSEMBLY and	DOLLARS CENTS	EA	10.000	168
	6266	2003	017	VIVDS SET-UP SYSTEM and	DOLLARS CENTS	EA	2.000	169
	6266	2005	017	VIVDS COMMUNICATION CAB	LE (COAXIAL) DOLLARS CENTS	LF	2,117.000	170

# PROJECT STP 2013(837)MM COUNTY LUBBOCK

	ITEM-CODE						DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	6834	2002		PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS		4.000	171
	8251	2003	005	RE PM W/RET REQ TY I(W)4"(BRK)(100MIL)  DOLLARS and  CENTS	LF	4,440.000	172
	8251	2006	005	RE PM W/RET REQ TY I(W)4"(SLD)(100MIL)  DOLLARS and  CENTS	LF	24,123.000	173
	8251	2018	005	RE PM W/RET REQ TY I(Y)4"(SLD)(100MIL)  DOLLARS and  CENTS	LF	23,851.000	174
	8942	2001		LONG CHANNEL MOUNT CURB SY(FURN & INST)  DOLLARS and CENTS	LF	424.000	175
	800	2001		NO.OF WORKING DAYS DAYS	\$/D	\$ 1,800.000	176

County: Lubbock Control: 0068-01-066

Highway: US 87

**GENERAL NOTES:** 

# **Compaction Requirements**

Percent of density as determined by compaction ratio (TEX-114-E)

ITEM	MATERIAL	DENSITY (MIN)
132	EMBANKMENT	98%
423	SELECT FILL	95%

# **Hot Mix Basis of Estimate**

ITEM	DESCRIPTION	*RATE (approx.)
3268	6 IN. ACP (TYPE-B) PG70-28 (BASE HMAC)	660 LBS/SY
3271	2 IN. SMA-D PG70-28 (SURF HMAC)	220 LBS/SY

<sup>\*</sup>Actual rates will be determined by Engineer in Field

# Hot Mix Area (SY)

MIX TYPE	SY
SMA-D (SURF HMAC)	67,355
ACP(TYPE-B) (BASE HMAC)	67,355

# **Surface Treatment Basis of Estimate**

DESCRIPTION	PRIME COAT	FOG SEAL
ASPH TYPE & GRADE	MC-30	CSS-IH
ASPH RATE (GAL/SY)	0.20	*0.09 Asph.
		Emulsion

<sup>\*</sup>Est. shot rate is 0.18 GAL/SY (50% Asph. Emul./50% Water) or as directed.

# **Surface Treatment Area (SY)**

PRIME COAT	FOG SEAL
68,935	70,744

County: Lubbock Control: 0068-01-066

Highway: US 87

## <u>W.W.A.R.P</u>

Provide coarse aggregate for all surface hotmix and overlays meeting a minimum class of  $\underline{\mathbf{A}}$  as published in the *AGGREGATE QUALITY MONITORING PROGRAM RATED SOURCE QUALITY CATALOGUE*.

Provide coarse aggregate for all base hotmix and surface treatments meeting a minimum class of **B** as published in the *AGGREGATE QUALITY MONITORING PROGRAM RATED SOURCE QUALITY CATALOGUE*.

# General Requirements and Covenants - Items 1 thru 9

Contract Prosecution – Each contract awarded by the Department stands on its own and as such, is separate from other contracts. A contractor awarded multiple contracts, must be capable and sufficiently staffed to concurrently process any and all contracts at the same time.

Provide adequate OSHA approved safety equipment (harnesses) for TxDOT personnel for construction inspection.

#### **Item 2 - Instructions to Bidders**

Carefully review the special specifications and detailed plan sheets. Although some items are similar to those installed in other areas of the State, this project contains details specific to the Lubbock District.

Pre-letting questions will be answered by calling the Lubbock Area's Office at (806) 748-4424.

The answers will be submitted in the same format that they are received. A file containing these questions and answers will be available for review at the Lubbock Area Engineer's office located at the Lubbock Area Office located at 135 Slaton Road, Lubbock, TX 79404.

Prior to contract letting, bidders may obtain a free disc or a computerized transfer of files (from the Engineer's office) that contains earthwork information. If copies of the actual cross-sections in addition to, or instead of, the disc are requested, they will be available at the Engineer's office for borrowing by copying companies for the purpose of making copies for the bidder at the bidder's expense.

View the plans on-line or download from the web at:

http://www.dot.state.tx.us/business/plansonline/plansonline.htm

Order plans from any of the plan reproduction companies shown on the web at: http://www.dot.state.tx.us/business/contractors consultants/repro companies.htm

County: Lubbock Control: 0068-01-066

Highway: US 87

#### **Utilities**

Overhead and underground utility installations exist within the project limits.

#### <u>Item 5 - Control of Work</u>

Set railroad spikes at all PCs, PTs and every 1500 feet along the centerline of each roadway in the final pavement surface.

When deviation from the plans is requested by the Contractor, but not required for installation, the Contractor will bear any additional costs associated with the deviation.

Alter the location of all ground boxes, foundations and structures shown on the plans only as approved by the Engineer in writing. Contact the Engineer prior to installing ground boxes, foundations and structures in order that the Inspector may verify and approve the location.

Restore all disturbed due to trenching or any construction activity to a condition equivalent to the original condition within 14 working days from the time work began in the area including all necessary seeding.

The construction, operation and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality.

#### **Item 6 - Control of Materials**

Use materials from pre-qualified producers. A list of material producers pre-qualified by the Construction Division (CST) of the Texas Department of Transportation (TxDOT) can be found at the following website:

http://www.txdot.gov/business/contractors\_consultants/producer\_list.htm

Deliver salvaged illumination bases & poles to the address below during regular business hours (8 a.m. to 4 p.m.).

Ricky Lawrence: Texas Department of Transportation

135 Slaton Road Lubbock, TX 79404 (806) 748-4317

In addition to the requirements of the plans and specifications, make all material and equipment furnished, installed, modified, tested, or otherwise used on this contract, and becoming the property of TxDOT, fully functional within the manufacturer normal specifications, warranties, and guarantees. Make any additional functions of the material and equipment normally supplied by the manufacturer, but not specified by TxDOT, completely functional.

County: Lubbock Control: 0068-01-066

Highway: US 87

#### <u>Item 7 - Legal Relations and Responsibilities</u>

Maintain access to adjacent property at all times.

Coordinate street closures with the local schools fire, police and other emergency personnel.

Notify, in writing, each residence and business 10 days prior to beginning construction of the phase/phases that are expected to affect their ingress and egress. This notice may be hand delivered or mailed.

When applicable, comply with all requirements of the Environmental Permits Issues and Commitments (EPIC) sheets.

Dispose of all waste materials in compliance with local, state and federal regulations. Submit a list of all approved waste sites to the Engineer for review.

Document and coordinate with the USACE, if required, prior to any excavation hauled from or embankment hauled into a USACE permit area by either (1) or (2) below.

- (1) Restricted Use of Materials for the Previously Evaluated Permit Areas. Document both the project specific location (PSL) and their authorization. Maintain copies for review by the department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:
  - a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110 is used for permanent or temporary fill (Item 132, Embankment) within a USACE permit area;
  - b. Suitable embankment (Item 132) from within the USACE permit area is used as fill within a USACE evaluated area; and,
  - c. Unsuitable excavation or excess excavation ["Waste"] (Item 110) that is disposed of at a location approved by the Engineer within a USACE evaluated area.
- (2) Contractor Materials from Areas Other than Previously Evaluated Areas. Provide the department with a copy of all USACE coordination or approval(s) prior to initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:
  - a. Item 132, Embankment, used for temporary or permanent fill within a USACE permit area; and,
  - b. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

Provide uniformed, licensed peace officers for traffic control during construction operations at and/or near the high volume intersections, and during critical changes in traffic control, as approved by the Engineer.

County: Lubbock Control: 0068-01-066

Highway: US 87

#### **Item 8 - Prosecution and Progress**

Monthly schedule updates are a very important aspect of managing the progress of this project. The Engineer may withhold the monthly estimate if the schedule update has not been received.

Critical path method planning schedule software (Primavera) will be required on this project.

Do not begin work before sunrise or end work after sunset unless authorized by the Engineer, and remove all equipment from the roadway before sundown.

Perform any erosion control measures such as seeding or sodding before beginning the next phase, or land, unless otherwise authorized by the Engineer.

Working days will be computed and charged in accordance with Article 8.3.A.1 Five-Day Workweek.

Work is allowed to be performed during the nighttime, with Engineer's approval. Provide 48 hour notice to the Engineer before performing nighttime work.

The road-user cost liquidated damages is **\$1,800** per day.

The maximum number of days that can be bid for the substantial completion of the Project is <u>306</u> days.

Substantial completion is defined in Special Provision 008-070 "Prosecution and Progress."

The maximum early completion incentive shall not exceed \$180,000.

The number of working days for final acceptance will be  $\underline{30}$  working days after the substantial completion of the project.

#### **Item 9 - Measurement and Payment**

Submit material-on-hand payment requests at least three working days prior to the end of the month for payment on that month's estimate.

#### **Item 100 - Preparing Right-Of-Way**

Item to be used for the preparation of areas to receive embankment, tree removal, and any other removals not itemized.

Sprinkler systems shall be cut at the right of way line and restored. Payment for this work shall be considered subsidiary.

County: Lubbock Control: 0068-01-066

Highway: US 87

Salvage and windrow existing topsoil for use as the final course of topsoil prior to seeding operations.

## Items 110 And 132 - Excavation and Embankment

Excavation (special) includes undercutting, removing, and disposing of undesirable material below subgrade as directed by the Engineer. Fill this volume using an approved material that meets the TY C embankment requirement of the plans. Cement stabilizing the unsuitable material with 3% cement may be an acceptable method as approved by the Engineer. Undesirable material is any material that doesn't meet the embankment requirement of the plans. Payment shall be subsidiary to this item. Special excavation will only be paid for when the nature of the existing soil does not meet the embankment requirement of the plans.

Provide Type C Embankment conforming to the following material specifications:

Liquid Limit (maximum) 45
Plasticity Index (maximum) 25
Bar Linear Shrinkage (minimum) 2

Consider all embankment to be Earth Embankment in accordance with Article 132.3.A.

Proof roll, as directed by the Engineer.

Approval may be granted, as directed by the Engineer, to incorporate rock and/or broken concrete with a maximum dimension of four (4) inches, produced by the construction project, in the lower layers of the embankment, provided the quantity of rock and/or broken concrete does not affect the ability to achieve specified density, as directed by the Engineer.

Excavated material NOT meeting the TY C embankment requirements of the plans may still be used as embankment in the lower layers of the new header as long as it does not have a PI greater than 35; however, the final top seven (7) feet of embankment material MUST meet the TY C requirements.

#### Item 161 - Compost

Salvage and stockpile topsoil from areas designated for compost placement as needed. Maximum salvage depth is 6-in. Furnish and install Compost Manufactured Topsoil (CMT) (BOS OR PB).

#### **Item 162 - Sodding for Erosion Control**

Furnish and place sod of the same variety as existing in the adjacent property. No additional compensation will be given for different varieties.

#### **Item 164 - Seeding For Erosion Control**

County: Lubbock Control: 0068-01-066

Highway: US 87

Notify the Engineer of scheduled seeding operations 24 hours prior to seeding applications. Do not begin seeding operations until the Engineer has approved seedbed preparations. Locate and flag all irrigation heads, valve covers, utility facility covers, etc. prior to commencing seed application operations.

Furnish seed tags from the seed supplier to the Engineer for verification of quantity and type.

Submit an available substitution to the Engineer, for approval, if a grass variety is not available.

Place cellulose fiber mulch (hydro-mulch) on all seeded and sodded areas.

Do not disturb or drive on newly seeded areas. Repair any damage to the seeded areas as directed.

#### <u>Item 166 - Fertilizer</u>

Provide and use a granular, commercial-grade, 15-5-10 analysis, "SCU" slow release fertilizer, applied at 660 lbs/acre.

Apply fertilizer prior to seeding, or simultaneously with the seeding operation, but prior to the hydromulch application.

Fertilizer shall be subsidiary to Item 164.

#### **Item 168 - Vegetative Watering**

Water newly seeded or sodded grass areas with a minimum of two-tenths (2/10) of an inch per day for 30 consecutive days or as directed by the Engineer.

Water newly seeded or sodded grass areas from a tanked, spray-equipped vehicle capable of spraying water to all such areas without driving or trailering the vehicle on said areas.

Furnishing and apply water containing less than 10,000 parts per million solids (as determined by evaporation).

#### Item 162, 164, and 168

Furnish and place cellulose fiber mulch, sod, seed, fertilizer, and vegetative watering on all cut and fill slopes as soon as each construction sequence will allow, but within 14 days of the end of the construction phase and prior to beginning a new construction phase. Leave the seeded areas lightly tracked in order to provide the seed a better environment for germination.

#### **Item 216 - Proof Rolling**

Provide a 25 ton roller, or other equipment approved by the Engineer for proof rolling.

County: Lubbock Control: 0068-01-066

Highway: US 87

Proof roll as directed.

## **Item 247 - Flexible Base**

#### SPECIFICATION DATA

# TEST TO BE IN ACCORDANCE WITH TEXAS DEPARTMENT OF TRANSPORTATION STANDARD TEST METHODS

#### FLEXIBLE BASE SPECIFICATION DATA

GRADING REQUIREMENTS PERCENT RETAINED – SIEVES SIEVE SIZES INCHES					SO CONS	OIL FANTS	MAX WET	MAX % INCREASE	MIN STRENGTH
1 3/4	7/8	1/2	#4	#40	L.L. MAX	P.I. MAX	BALL		15 PSI
0	15-30	35-55	55-75	75-90	40	12	45	20	175

The addition of field sand to reduce the plasticity index a maximum of three points below the original P.I. is permitted. Introduce field sand at the crusher on a feed belt prior to building the stockpile.

The addition of lime, or suitable material as approved by the Engineer, is permitted to reduce the plasticity index, if the mixture is mixed on the road or in a pugmill just prior to placement.

Proof roll, as directed by the Engineer.

New Flex Base will be incorporated with Reworked Base.

## **Item 251 - Reworking Base Material**

Before replacing salvaged material, construct and shape subgrade, using density control in accordance with Article 132.3.D.2.

#### <u>Item 310 - Prime Coat</u>

Apply a prime coat to all finished treated base, new flexible and salvage base due to receive asphaltic concrete pavement or surface treatments. Remove all loose and scabbed material from the surface prior to prime coat application.

Allow the prime coat to penetrate and dry for a minimum of 72 hours before placing any asphaltic material on the primed surface, unless otherwise authorized by the Engineer.

County: Lubbock Control: 0068-01-066

Highway: US 87

# <u>Item 354 - Planing and Texturing Pavement</u>

The 1" milling material will not be allowed as RAP.

Any excess milling material will become the property of the Contractor.

#### **Item 400 - Excavation and Backfill for Structures**

Construct fill over structures to plan grade before hauling with heavy equipment over structures.

Compact backfill used for structures, other than flowable backfill, to a minimum density of 95 percent.

Use a template in order to secure reasonably accurate Class C shaping of the foundation material outside of cement stabilized areas.

Contact the utility company and properly secure the utility poles prior to excavating next to the utility poles. The work and material used to secure the utility poles are subsidiary to the pertinent items.

#### **Item 402 - Trench Excavation Protection**

Maintain trench protection to protect State inspectors and Contractors during testing operations.

#### **Item 416 - Drilled Shaft Foundations**

Use Class "C" concrete for traffic signal pole foundations.

Do not extend traffic signal pole foundations more than two inches above natural ground, medians or other surfaces surrounding the drilled shaft unless approval is obtained from the Engineer.

#### **Item 420 - Concrete Structures**

Provide Class C (HPC) concrete for bridge substructure components, with 35% fly ash and 5% silica fume. Class C fly ash will be allowed.

Consolidate concrete for bridge components reinforced with epoxy coated reinforcing steel with vibrators having rubber or non-metallic heads in order to prevent damage to the epoxy.

Tie epoxy-coated reinforcing steel with epoxy-coated tie wire.

Furnish and place preformed fiber material, a minimum one-half (1/2)-inch thick, as shown on the plans or directed by the Engineer.

General Notes Sheet I

County: Lubbock Control: 0068-01-066

Highway: US 87

Furnish a temperature recorder with the minimum capabilities of a 7-day recording time, 2 degree F division, and 120 VAC with 9-volt backup, for each curing tank used on the project. Supply all charts, recording pins, and other equipment necessary for complete operation of the temperature recorder during the project. The temperature recorder and all associated equipment will not be paid directly, but will be subsidiary to the various bid items

Use Grade 3 coarse aggregate in all concrete structures.

Cold weather protection requirements within 72 hours of a concrete paving pour as per the following table:

PROJECTED LOW TEMP	PROTECTION REQUIRED		
< 20 degrees	DO NOT POUR		
20-27 degrees	cover with plastic, then a insulating blanket, and plastic on top		
28-35 degrees	cover with plastic, then a insulating blanket		
> 35 degrees	no protection required		

All projected temperatures will be based on the NOAA website. None of the above actions releases the Contractor from the responsibility for freeze damaged concrete for whatever reason.

Coring of structural classes of concrete will not be allowed. All coring of miscellaneous concrete shall be at the Contractor's expense including all prep work. Coring must be completed within 3 days of notice of failing 28-day samples; otherwise pay deductions apply using 28-day compressive strength.

#### <u>Item 421 - Hydraulic Cement Concrete</u>

Entrained air will be required in all concrete except drilled shafts.

The sodium sulfate soundness Test Method TEX-411-A is waived.

Supply 2-4' x 8' x  $\frac{3}{4}$ '' sheets of plywood, in order to perform required testing procedures at the location of concrete placements.

Use 4-inch by 8-inch cylinder molds for concrete with Grade 3 or smaller coarse aggregate. Supply new cylinder molds and lids subsidiary to the various bid items.

Concrete plant must be capable of providing automated moisture content control for both coarse and fine aggregate.

#### <u>Item 422 - Reinforced Concrete Slab</u>

Provide Class S (HPC) concrete for bridge decks.

County: Lubbock Control: 0068-01-066

Highway: US 87

Do not use silica fume in Class S (HPC) concrete for bridge decks.

Load with concrete and screed bridge slabs on the same skew angle as the bridge.

Provide Class S (HPC) with a minimum of 35% fly ash. Class C fly ash will be allowed.

Provide fibers in accordance with DMS-4550.

Bridge forms will not be allowed if they leave holes in the deck.

Tie 100% of epoxy-coated reinforcing steel in the top mat and 50% of epoxy-coated reinforcing steel in the bottom mat. Use epoxy-coated tie wire.

#### <u>Item 423 - Retaining Walls</u>

For MSE walls, provide a system from one of the following approved suppliers:

Reinforced Earth Walls The Reinforced earth Company 1331 Airport Freeway, Suite 302 Euless, TX 76040-4150 (817) 283-5503

Retained Earth Walls Foster Geotechnical 901 North Highway 77 Hillsboro, TX 76645 (254) 580-9100

Reinforced Soil Embankment Walls Texas Welded Wire, Inc. 645 W. Hurst Blvd. Hurst, TX 76053 (817) 282-4560

Strengthened Earth Walls Hanson Concrete Products 3500 Maple Ave. Dallas, TX 75219 (214) 525-5877

Tricon Retained Soil Walls Tricon Precast Inc. 15055 Henry Rd. Houston, TX 77060

County: Lubbock Control: 0068-01-066

Highway: US 87

(713) 931-9832

Tensar Retaining Wall System Tensar Earth Technologies, Inc. 5775-B Glenridge Dr. Atlanta, GA 30328 (404) 250-1290

Strengthened Soil Walls Shaw Technologies Inc. P.O. Box 271448 Flower Mound, TX 75027 (972) 490-1924

VP Wall System Valley Prestress Products, Inc. P.O. Box 1367 Mission, TX 78573 (956) 584-5701

Form Liner Treatments – Do not splice, cut and join, or glue the form liner panels. Fabricate each panel to form a one piece unit to the size and specifications set forth in the plan sheets.

Wash and clean form liners made of multi-use materials after each use. Replace form liners that, in the opinion of the Engineer, has become damaged or worn. Replacement of form liner material is considered incidental to the work and will not entitle the contractor to additional compensation.

Pour and finish a 4.0 ft x 4.0 ft minimum sample panel of all form liner finishes. The panels shall meet the requirements of the plans and specifications and be approved by the engineer before beginning any work. The sample panel shall be considered typical for the finish. Any deviation of color, grade, or depth from the panel will be grounds for rejection of the form liner treatment and shall be removed and replaced as specified in the contract. The sample panel shall not be paid for directly but shall be considered subsidiary to the various bid items.

The MSE wall panels shall be a block form pattern meeting Ashlar Slate Pattern No. 16972 or equivalent.

Underdrains will not be required on fill walls.

The Contractor is hereby made aware that there will be various structures within the reinforced zone, such as, but not necessarily limited to, overhead sign foundations, illumination foundations, traffic signal foundations, posts for MBGF, CRCP anchor lugs and drainage structures. The Contractor's shop drawings shall address the placement of MSE wall reinforcements around these structures. Please note that the placement of the posts for the MBGF must occur after the MSE wall and reinforcements have been installed. The shop drawings must show the accommodations

County: Lubbock Control: 0068-01-066

Highway: US 87

for these posts. Should any conflicts arise during construction; the contractor shall bear these costs.

# **Item 424 - Precast Concrete Structures (Fabrication)**

Use Class H (HPC) concrete for prestressed concrete beams.

Include 3 gallon of calcium nitrite corrosion inhibitor per cubic yard of Class H (HPC) concrete for prestressed concrete beams.

#### <u>Item 427 - Surface Finishes For Concrete</u>

Provide surface area I concrete surfaces with a rub finish.

Provide Ty II curing compound for all curb and gutter, sidewalks, driveways, curb ramps, riprap, curb inlets, headwalls, wingwalls and cast-in-place.

Complete any necessary grinding on concrete surfaces to receive a concrete paint coating within 24 hours of form removal. The surface should then be blast cleaned, followed by an ordinary surface finish, epoxy paint if required, and finally the concrete paint coating.

T551 rail and bridge components shall be opaque sealed a color scheme as directed by the Engineer. This is considered subsidiary.

There will be no additional payment for surface preparation over opaque sealed areas.

#### Item 432 - Riprap

Provide 4-inch thick concrete riprap, unless otherwise indicated in the plans.

In large areas of riprap, provide one-half (1/2)-inch thick expansion joint material at approximately 15-foot intervals, or as determined by the Engineer.

#### **Item 440 - Reinforcing Steel**

Tie epoxy-coated reinforcing steel at every intersection with epoxy-coated tie wire.

Fibers 1-1/2" long can be substituted for wire mesh as approved by the Engineer.

#### **Item 464 - Reinforced Concrete Pipe**

Join all concrete culvert pipe with a cold-applied plastic asphalt sewer joint compound.

County: Lubbock Control: 0068-01-066

Highway: US 87

Slopes shown on the plans are based upon the hydraulic length of the pipe, which run from centerline of structure to centerline of structure. The pay lengths shown on the plans run from the inside wall of structure to inside wall of structure.

#### **Item 467 - Safety End Treatment**

Install reinforced concrete aprons on all Type I SET, using reinforcing composed of #4 bars at 12-inch spacings, center-to-center, or as shown on the detail sheet.

Install riprap around all precast SETs.

## <u>Item 496 - Removing Old Structures</u>

All removed items shown on the plans are property of the Contractor, unless shown otherwise.

All headwall, wingwall, riprap or SET removal will be subsidiary.

#### Item 502 - Barricades, Signs And Traffic Handling

Prior to beginning construction, the Engineer shall approve the routing of traffic and sequence of work.

Additional signs and barricades as directed by the Engineer shall be considered subsidiary to Item 502.

Provide flashing portable arrow panels for all lane closures.

Wash the channelizing devices and barricades once every 7 days and after each weather event (rain, snow, sleet, dust, etc.) and at times deemed necessary by the Engineer.

To ensure the safety and convenience of traffic, flaggers may be required when construction machinery is being operated along, across, or adjacent to lanes carrying traffic. If considered necessary by the Engineer, supplemental signs and barricades may be required.

Fill any holes left by barricade or sign supports and restore the area to its original condition.

Provide heavy duty "green" springs for dual chevrons on projects requiring flexible support systems.

Barricades, Signs and Traffic Handling is a plan quantity item. If time is suspended, no additional compensation will be made.

County: Lubbock Control: 0068-01-066

Highway: US 87

The contractor shall bid the traffic control plan shown in the plans. Any proposed alterations to the TCP (combining work areas/ phasing/ etc.) shall be submitted to the Engineer at least 10 days prior to anticipated changes.

Traffic switches will not be permitted on Fridays or any working day preceding a holiday unless authorized by the Engineer.

Cones or chevrons may be used in lieu of vertical panels at the discretion of the Engineer. Cones cannot be used to separate opposing traffic.

Construct temporary ramps to maintain access to driveways and city streets as directed by the Engineer. Temporary ramp construction is subsidiary to Item 502.

Even when not explicitly shown in the project TCP, vertical panels shall be used with an opposing lane divider every 5<sup>th</sup> panel in accordance with BC(9) for all opposing traffic conditions without a positive barrier.

Square tubing sign supports may be used for temporary construction signs. Aluminum and wood signs may be mounted if the vertical supports are embedded into the ground. Square tubing supports on skids which are typically held in place with sand bags can only support signs made of light weight flutted plastic.

Any trench or drop off over 2" will require a safety slope of at least 1:1 and can be constructed out of RAP, embankment or other material approved by the Engineer. The placement, maintenance and removal is the responsibility of the Contractor and is subsidiary to the various items.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The "Safety Contingency" is not intended to be used in lieu of bid items established by the contract.

#### **Item 504 - Facilities for Field Office and Laboratory**

Furnish one Type D structure.

Partition the floor of the Type D structure into a minimum of three interconnected rooms. Furnish each room with a door. Type D structure must have at least two windows and two exterior doors. Block and tie down portable structures.

Equip the Type D field lab with an eyewash facility capable of flushing the eyes for at least 15 minutes, connected to the main water supply or an approved stand-alone water supply.

County: Lubbock Control: 0068-01-066

Highway: US 87

Equip the field lab with a surge protector at the circuit breaker panel.

#### **Item 508 - Constructing Detours**

Provide detour sections consisting of six inches of Base HMAC on prepared subgrade to lines and grades directed by the Engineer.

#### Item 512 - Portable Concrete Traffic Barrier

The location of the designated source shall not exceed twenty miles from the project limits.

#### **Item 540 - Metal Beam Guard Fence**

Mount an amber or white reflector on the guard fence at 100-foot intervals. Use prismatic reflective sheeting. Place a minimum of three reflectors at each metal beam guard fence placement.

Use Class-A, Type I metal beam guard fence.

Use steel posts.

Material-on-hand for metal beam guard fence rail will not be paid unless it is properly stored (out of the elements) to reduce white rust.

Relapping of metal beam guard fence will be subsidiary to this item.

#### **Item 585 - Ride Quality for Pavement Surfaces**

Use Surface Test Type  $\underline{\mathbf{A}}$  on frontage roads and ramps.

Use Surface Test Type  $\underline{\mathbf{B}}$  on main lanes and Woodrow Road.

"Pay Adjustment Schedule" number **2** will be used on this project.

Corrective action, when required, shall be diamond grinding, as approved and directed by the Engineer.

# **Item 610 - Roadway Illumination Assemblies**

Roadway illumination poles built in accordance with the RIP standard sheets will not require preapproved shop drawings. Deviations will require submission of shop drawings for approval.

County: Lubbock Control: 0068-01-066

Highway: US 87

Use materials for pre-qualified material producers list as shown on the Texas Department of Transportation (TxDOT) web site under- Construction Division's (CST) materials producers list. Category is "Roadway Illumination and Electrical Supplies.

The existing illumination assemblies (bases and poles) will be salvaged.

#### Item 618 - Conduit

The location of conduit is diagrammatic and may be varied to meet local conditions upon approval of the Engineer. Ensure all couplings and connectors are made wrench tight. Trenching depths shall provide a minimum of 2.5 feet (30 inches) of cover unless otherwise approved by the Engineer. The Contractor must ensure that conduit is not damaged during trench or bore pit backfilling operations. No conductors shall be pulled through conduit until all backfilling for the conduit run is complete and the template, having a diameter of not less than 75 percent of the inside diameter of the conduit, has been drawn through the conduit. Open ends of all conduit shall be fitted with temporary caps or plugs to prevent entry of dirt or debris during construction operations. A non-metallic pull rope shall be used to pull electrical conductors and traffic signal cables through non-metallic conduit. A 1/4-inch nylon or polypropylene pull rope shall be pulled through each conduit run and shall remain in the conduit for future use. A minimum of three feet of pull rope shall be neatly left coiled in the ground boxes at each end of the conduit run. The pull rope will not be paid for directly but shall be considered subsidiary to Item 618, "Conduit." After the work is completed, the Contractor shall restore any curbs, walks, driveways or raised concrete medians which have been damaged or disturbed to an equivalent original condition and to the satisfaction of the Engineer. This work shall not be paid for directly but shall be considered subsidiary to Item 618, "Conduit."

Use schedule 40 PVC conduit. Bore the conduit runs placed under driveways and street or highway approaches. Maintain a minimum of 30 inches below the proposed natural ground elevation or 36 inches below the existing driveway or proposed top of pavement. Backfill and compact trenches the same day or erect plastic fencing to discourage entry into the trenched area by pedestrians or vehicles.

High-density polyethylene (HDPE) pipe may be threaded and used with threaded PVC connectors or couplings.

PVC conduit systems that snap or lock together without glue that are designed and UL listed to be used for bored PVC electrical conduit applications will be allowed for bored PVC schedule 40 or schedule 80, when approved by the Engineer. No additional compensation will be paid to the Contractor when these specific purpose conduit systems are substituted for this purpose.

All conduit elbows and rigid metal extensions required to be installed on PVC conduit systems will not be paid for separately, but will be considered subsidiary to the various bid items.

County: Lubbock Control: 0068-01-066

Highway: US 87

Install a continuous bare or green insulated copper wire No. 6 AWG or larger in every conduit throughout the electrical system in accordance with the electrical detail sheets (ED) and the latest edition of the National Electrical Code.

Do not use cast iron junction boxes in concrete traffic barriers and single slope traffic barriers. Use polymer concrete junction boxes instead of the cast iron junction boxes shown on the standard sheets CTBI (3), CTBI (4), AND SSCB (4). Mount the junction boxes flush (+ 0", - 1/2") with concrete surface of concrete barrier.

Use materials for pre-qualified material producers list as shown on the Texas Department of Transportation (TxDOT) web site under- Construction Division's (CST) materials producers list. Category is "Roadway Illumination and Electrical Supplies.

The polymer concrete barrier box will not be paid for separately, but will be considered subsidiary to Item 618 "Conduit".

#### .Item 620 - Electrical Conductors

Grounding conductors that share the same conduit, junction box, ground box or structure shall be bonded together at every accessible point in accordance with the electrical detail sheets (ED), and the latest edition of the National Electrical Code.

Use certified persons to perform electrical work. See Item 7.15 "Electrical Requirements" for additional details.

#### **Item 628 - Electrical Services**

The STATE will be responsible for energy consumed and monthly telephone charges occurred by the new electrical service locations. These charges should be billed to the Texas Department of Transportation, 135 Slaton Highway, Lubbock, TX 79404-5201

Provide circuit breaker and install when additional circuit from existing electrical service is called for in the plans.

Concrete for service pole foundations, when required, will be Class A and will be in accordance with Item 421: Concrete for Structures, except that concrete will not be paid for directly but is to be considered subsidiary to Item 628: Electrical Services. Reinforcing steel for service pole foundations, when required, will be in accordance with Item 440: Reinforcing Steel, except that reinforcing steel will not paid for directly but is to be considered subsidiary to Item 628: Electrical Services.

#### <u>Item 644 - Small Roadside Sign Assemblies</u>

County: Lubbock Control: 0068-01-066

Highway: US 87

All YIELD and STOP signs for intersecting roadways placed inside the clear zone of the main roadway and less than 7 feet in height as measured from the main roadway require a retroreflective wrap on the sign support. This wrap shall be 12 inches in height, visible in all directions and shall be placed 4 ft. above the roadway. The color shall be red. This retroreflective wrap will not be paid for directly but considered subsidiary to Item 644.

Stake all sign locations, and receive approval from the Engineer, prior to sign placement.

The triangular slip bases will be the two bolt clamp type (Southern Plains Fabrication or equivalent). For more information refer to the approved materials producers list: <a href="http://www.txdot.gov/business/contractors\_consultants/producer\_list.htm">http://www.txdot.gov/business/contractors\_consultants/producer\_list.htm</a>

#### <u>Item 647 - Large Roadside Sign Supports and Assemblies</u>

To adjust the height of the existing sign, welding will only be allowed at the bottom of the flange.

# <u>Items 644 & 647</u>

Perform the following work subsidiary to Items 644 and/or 647.

For all signs designated for removal:

- Salvage plywood 48" X 48" and larger, if not rotted or delaminated, and all aluminum signs,
- Palletize and band salvaged aluminum signs,
- Stockpile signs at the following location as directed by the Engineer.

Contact Person: Bud Justus (806) 748-4477

Address: 135 Slaton Road

Lubbock, TX 79404

#### Item 656 - Foundations for Signs, Traffic Signals and Roadway Illumination Assemblies

Use Class "C" concrete for traffic signal pole foundations.

Locate the bases for signal poles a minimum of 2 feet from the back of vertical curbs.

All existing wheelchair ramps, curbs and sidewalks are shown on the plans. If any repairs to these items should be needed after drilling foundations, installing pull boxes, conduit or loop detectors, the repairs shall be made by the Contractor as directed by the Engineer and shall be considered subsidiary to Item 656.

Do not extend traffic signal pole foundations more than 2 inches above natural ground, medians or other surfaces surrounding the drilled shaft unless approval is obtained from the Engineer.

County: Lubbock Control: 0068-01-066

Highway: US 87

Drill shafts for roadway illumination assemblies located on the concrete traffic barrier will be required and are subsidiary to Item 514.

## **Item 662 - Work Zone Pavement Markings**

Use short-term removable striping as directed by the Engineer.

Water based paint will be allowed on asphalt surfaces in lieu of removable pavement markings as directed by the Engineer. If water based paint is used, there will be no payment for striping refresh.

The deviation rate in alignment shall not exceed one inch per 200 feet of roadway. The maximum deviation shall not exceed 2 inches nor shall any deviation be abrupt. Striping not in conformance shall be removed and replaced at the Contractor's expense.

All removable work zone pavement markings placed on concrete surfaces shall consist of ceramic buttons and RPMs as shown on standard sheet BC(11). These shall be applied with a thermoplastic adhesive, unless otherwise directed by the Engineer.

No guide markers will be placed on a finished surface unless they fall on a proposed lane line. Stick-down markings will be removed by the Contractor prior to final marking.

Remove tabs after standard pavement markings have been placed. Cut off or remove tabs by a method acceptable to the Engineer.

Type I markings must be at least one twenty-fifth (1/25) of an inch thick.

Remove ceramic buttons, RPMs, and Adhesives as directed by the Engineer. Payment for this work is subsidiary to Item 662.

#### **Item 677 - Eliminating Existing Pavement Markings and Markers**

Eliminate markings on existing SMA by Method C only.

Payment for covering a solid yellow line with a broken yellow line next to it, parallel to the centerline of the highway, will be by the linear foot. This payment will be made only once for two stripes side-by-side.

## <u>Item 678 - Pavement Surface Preparation for Markings</u>

Use dry sandblasting for pavement surface preparation for markings or as indicated in the plans.

#### Item 680 - Installation of Highway Traffic Signals

County: Lubbock Control: 0068-01-066

Highway: US 87

Turn all non-operational signal heads down facing the roadway surface, or completely cover the lenses with an opaque material. The location of signal poles, conduit, ground boxes and controllers may be adjusted to accommodate existing utilities or local conditions with prior approval of the Engineer. Verify the location of all existing utilities in the field prior to construction. Provide a technician on call in the city at all times during the required 30-day test period. All work and materials necessary for a complete traffic signal installation at each intersection will not be paid for directly but will be considered subsidiary to Item 680, "Installation of Highway Traffic Signals."

#### **Item 682 - Vehicle and Pedestrian Signal Heads**

Provide aluminum vehicle signal heads for this project. Furnish ABS formed black plastic backplates with the vehicle signal heads. Attach back-plates to the vehicle signal heads and with a minimum of ½ inch of material from the edge of mounting holes to the near edge of the back plate. Furnish aluminum visors for vehicle signal heads.

Mount the signal head for horizontally mounted vehicle signal heads, at least 18 feet but no more than 20 feet, above the pavement grade measured from the center of the roadway to the bottom of the signal head.

#### **Item 684 - Traffic Signal Cables**

Make electrical splices or connections in the signal pole base with terminal strips.

#### **Item 686 - Traffic Signal Pole Assemblies (Steel)**

Use bracket assembly Option C of the SMA-100 and DMA-100 Standard Sheets for signal head mounting for both horizontal and vertical mount signal heads. Check foundation elevations to assure compliance with mounting height requirements.

Attach dampening devices to mast arms 36 feet in length and longer. Dampening will not be paid for directly, but will be considered subsidiary to Item 686 – "Traffic Signal Pole Assemblies".

Internally wire signal cable for the vehicular signal heads without drip loops. Thread the hole in the mast arm shaft leading into the astro-bracket mount for a CGB connector or a galvanized pipe nipple. Furnish and install CGB connectors or galvanized pipe nipples. The materials and work necessary will not be paid for separately but will be considered subsidiary to Item 686 – "Traffic Signal Pole Assemblies".

#### **Item 730 - Roadside Mowing**

Mow full-width from pavement edge to Right-of-Way line  $\underline{6}$  times. The Engineer shall dictate the times to mow and the areas in the project to mow.

County: Lubbock Control: 0068-01-066

Highway: US 87

## <u>Item 734 - Litter Removal</u>

Perform litter removal prior to mowing and as directed.

# **Item 738 - Cleaning and Sweeping Highways**

Cleaning and sweeping existing pavements will be bi-monthly and as directed by the Engineer.

# **Item 1122 - Temporary Erosion, Sedimentation and Environmental Controls**

Place a weatherproof bulletin board containing the TCEQ required information on the project at a site directed by the Engineer. Post the following documents: (1) "TCEQ TPDES Storm Water Program" Construction Site Notice; (2) TCEQ "Notice of Intent"; and (3) TCEQ "TPDES Permit." Place rain gauge(s) at locations designated by the Engineer. At the completion of the contract, the bulletin board will become the property of the State and will remain in place until 70 percent vegetation coverage has been obtained.

Provide long-term, Type 1 construction exits, located at the Contractor's equipment storage area.

Place construction exit locations as directed by the Engineer. Use bituminous foundation course for all construction exits regardless whether they are long or short term.

Replace construction exits quarterly or as directed by the Engineer.

Construction exits will be washed or turned weekly and as directed by the Engineer. This will be considered subsidiary.

Haul roads shall be dampened for dust control. Loaded haul trucks are to be covered with tarpaulin and any excess dirt on the roadway shall be removed daily. This shall be considered subsidiary to the various bid items.

Provide plastic lined concrete truck washout pits at various locations on the project. This will be considered subsidiary.

Silt fence, sandbags and other BMPs will be placed and relocated as directed by the Engineer in order to comply fully with the SW3P requirements.

The soil area disturbed by this project, including all disturbed areas within the limits of this project as described in the Contract and at Contractor project specific locations (PSLs) within one mile of the project limits, contributes to the establishment of the Texas Commission on Environmental Quality (TCEQ) Construction General Permit (CGP) requirements for storm water discharges. The Department will obtain an authorization from the TCEQ to discharge storm water for construction activities shown on the plans. The Contractor shall obtain the required authorization

County: Lubbock Control: 0068-01-066

Highway: US 87

from the TCEQ for Contractor project specific locations (PSLs) for construction support activities off the right-of-way. As directed by the engineer, the Contractor shall obtain any required authorization from the TCEQ for on-site PSLs. When the total area disturbed within the project limits and at PSLs within one mile of the project limits exceeds five acres, the Contractor shall provide a copy of the Contractor's Notice of Intent (NOI) submission and Construction General Permit for PSLs on the right-of-way to the Engineer (and submit a copy of NOIs to appropriate MS4 operators).

Any disturbed soil must be temporarily stabilized no more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Contractor shall schedule stabilization mobilization accordingly.

Water pumped off the project must have sediment and any other solids in suspension removed before discharging.

## <u>Items 3267, 3268, 3269, 3270 and 3271 – Hot Mix Asphalt Pavement</u>

Provide a summary spreadsheet for each lot in accordance with Article 520.2 of the Standard Specifications.

When not using a Pave-IR system for specification compliance, place mixture when the roadway surface temperature is equal to or higher than the temperatures listed in Table 1 below unless otherwise approved or shown on the plans. Measure the roadway surface temperature with a handheld infrared thermometer. The Engineer may allow mixture placement to begin prior to the roadway surface reaching the required temperature requirements if conditions are such that the roadway surface will reach the required temperature within 2 hrs. of beginning placement operations. Place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable in the opinion of the Engineer. The Engineer may restrict the Contractor from paving if the ambient temperature is likely to drop below 32°F within 12 hours of paving.

Table 1
Minimum Pavement Surface Temperatures

		Minimum Pavement Surface	
		Temperatures	
		in Degrees Fahrenheit	
Specification Item Number	High Temperature Binder Grade	Subsurface	Surface Layers
		Layers or Night	Placed in Daylight
		Paving Operations	Operations
Items 3267 & 3268	PG 64	50	50
	PG 70	60 <sup>1</sup>	$60^{1}$
Items 3269, 3270 and 3271	PG 70	70 <sup>1</sup>	70 <sup>1</sup>

County: Lubbock Control: 0068-01-066

Highway: US 87

Note 1: Contractors may pave at temperatures 10°F lower than the values shown in Table 1 when utilizing a paving process or equipment that eliminates thermal segregation. In which cases, the Contractor must use either an infrared bar attached to the paver or a hand held thermal camera to demonstrate to the satisfaction of the Engineer that the uncompacted mat has no more than 10°F of thermal segregation.

The Engineer will take asphalt samples to perform Dynamic Shear Rheometer (DSR) testing at the beginning of the project and randomly throughout the project to verify compliance. These tests will be performed at the district laboratory. If the district tests fail, cease production. Any costs or delays associated to failing results will be solely the responsibility of the Contractor.

If the VMA fails, take corrective action. If consecutive tests fail, cease production, unless otherwise authorized by the Engineer, until the ability to produce the desired material can be demonstrated to the satisfaction of the Engineer.

Collect haul tickets from each load of mixture delivered to the project and provide the Department's copy to the Engineer approximately every hour, or as directed by the Engineer. Measure and record the temperature of the mixture as discharged from the truck or material transfer device prior to entering the paver and an approximate station number on each ticket. Calculate the daily and cumulative yield for the specified lift and provide to the Engineer at the end of paving operations for each day. The Engineer may suspend production if the Contractor fails to produce haul tickets and yield calculations by the end of paving operations for each day.

Develop and submit a Quality Control Plan for approval at least two working days before the mandatory pre-paying meeting.

# <u>Item 3268 – Dense-Graded Hot-Mix Asphalt</u>

Design the mixture with a Superpave Gyratory Compactor (SGC).

PG 70-28 asphalt is required for this project.

Asphalt stabilized base will not be allowed as RAP.

The surface course and level up course will be laid separately.

Aggregate will be subjected to five cycles of the magnesium sulfate soundness test in accordance with Test Method TEX-411-A. The loss shall not be greater than 25 percent.

Fractionate the RAP if used in the mixture design.

Post-consumer RAS will not be allowed.

County: Lubbock Control: 0068-01-066

Highway: US 87

The mix will be evaluated for stripping through the boil and hamburg wheel tests. If it is determined to be stripping then 1% lime, liquid anti-strip or a warm mix additive proven to prevent stripping will be required.

Immediately after coring, remove all moisture and debris from each core hole, tack the inside vertical face of each core hole with AC or PG asphalt, and place hot mix in lifts not to exceed three inches or as directed by Engineer. Use slide hammering or other approved method(s) to achieve compaction.

Provide a trackless asphalt for tack coat at a rate of 0.10-0.13 gal/sy.

Tack coat all vertical joints.

#### <u>Item 3271 – Stone-Matrix Asphalt</u>

Place surface hot mix between May 1 and September 30.

PG 70-28 is required for this project.

Aggregate will be subjected to five cycles of the magnesium sulfate soundness test in accordance with Test Method TEX-411-A. The loss shall not be greater than **18** percent.

Design the mixture to ensure stone-on-stone contact.

Immediately after coring, remove all moisture and debris from each core hole, tack the inside vertical face of each core hole with AC or PG asphalt, and place hot mix in lifts not to exceed three inches or as directed by Engineer. Use slide hammering or other approved method(s) to achieve compaction.

Provide a trackless asphalt for tack coat at a rate of 0.10-0.13 GAL/SY.

Tack coat all vertical joints with trackless tack, unless otherwise directed.

Cement and kiln dust will not be allowed to be used as mineral fillers.

Design the mix at Ndes = 50, or as directed by the Engineer.

Fractionate the RAP if used in the mixture design.

#### <u>Items 666 & 8251 – Pavement Markings</u>

Reference the existing striping in order to stripe the roadway as it was prior to sealing.

County: Lubbock Control: 0068-01-066

Highway: US 87

Mark the location of standard pavement markings, including barrier lines, no passing zones, gores, and transitions adjusting to meet latest standards or as directed by the Engineer.

For surface treatment projects, leave the final course in place for three days and broom the roadway directly ahead of the striping machine prior to placing standard pavement markings.

After completion of all work and removal of the barricades, time charges will be suspended. The performance period for the project will not begin until all the striping has been completed. Final acceptance will not be granted until the performance period for pavement markings is complete. If replacement markings are needed, traffic control for moving operations will be required. No payment will be made for traffic control during replacement striping work. All traffic control work shall be considered subsidiary to the project's replacement striping work.

The yellow or white long-line striping for re-striping operations will not lag one another by more than four (4) working days. The performance period for a roadway will not begin for a section of roadway or a project until all required striping for that section or project has been completed.

#### Item 6834 - Portable Changeable Message Sign

Provide messages as directed by the Engineer.

Provide 4 solar powered changeable message signs for this project.

